

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 May 2001 (10.05.2001)

PCT

(10) International Publication Number
WO 01/33220 A3

(51) International Patent Classification⁷: G01N 33/50,
33/566

International Application Number: PCT/US00/19497

International Filing Date: 13 July 2000 (13.07.2000)

Publication Language: English

Publication Language: English

(30) Priority Data:
77143,830 13 July 1999 (13.07.1999) US

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): AMYLIN PHARMACEUTICALS, INC. [US/US]; 9373 Towne Centre Drive, San Diego, CA 92121 (US).

Published:

— with international search report

(88) Date of publication of the international search report:
25 October 2001

(72) Inventors; and
(75) Inventors/Applicants (*for US only*): YOUNG, Andrew [US/US]; 9514 Easter Way, San Diego, CA 92121 (US). GEDULIN, Bronislava [US/US]; 12825 Stebick Court, San Diego, CA 92130 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(74) Agent: KREUSSER, Edward, O.; Brobeck, Phleger & Harrison LLP, 12390 El Camino Real, San Diego, CA 92130 (US).

(54) Title: THE USE OF THE *AREA POSTREAMA* TO IDENTIFY THERAPEUTIC COMPOUNDS

(57) Abstract: Methods for identifying or screening or characterizing or assaying or isolating known or candidate compounds that stimulate or inhibit *area postrema* activity, for example *area postrema* activities relating to fuel homeostasis.

WO 01/33220 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/19497

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/50 G01N33/567 G01N33/566

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	K. MILLER ET AL.: "Membrane-bound and solubilized brain 5HT3 receptors: improved radioligand binding assays using bovine Area Postrema or rat cortex and the radioligands 3H-GR65630, 3H-BRL43694, and 3H-LY278584." SYNAPSE., vol. 11, no. 1, 1992, pages 58-66, XP000987247 WILEY AND SONS, CHICHESTER., GB ISSN: 0887-4476 the whole document --- -/--	1-20

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

1 March 2001

Date of mailing of the international search report

14/03/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Griffith, G

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 00/19497

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	B. A. WHELAN ET AL.: "Synthesis and structural, conformational, biochemical, and pharmacological study of new compounds derived from Tropane-3-spiro 4'(5')-imidazoline as potential 5-HT3 receptor antagonists" JOURNAL OF PHARMACEUTICAL SCIENCES., vol. 84, no. 1, January 1995 (1995-01), pages 101-106, XP002161801 AMERICAN PHARMACEUTICAL ASSOCIATION. WASHINGTON., US ISSN: 0022-3549 page 103, column 2 -page 104, column 2 ---	1-20
Y	US 5 264 372 A (K. BEAUMONT ET AL.) 23 November 1993 (1993-11-23) cited in the application the whole document ---	1-20
Y	A. H. HASSEN ET AL.: "Delta versus mu receptors: cardiovascular and respiratory effects of opiate agonists microinjected into nucleus tractus solitarius of cats" REGULATORY PEPTIDES., vol. 4, 1982, pages 299-309, XP000987248 ELSEVIER SCIENCE BV., NL ISSN: 0167-0115 the whole document ---	1-20
Y	K. HERRICK-DAVIS ET AL.: "Detection and characterization of a 5HT1D serotonin receptor-GTP binding protein interaction in porcine and bovine brain" SYNAPSE., vol. 3, 1989, pages 325-330, XP000618699 WILEY AND SONS, CHICHESTER., GB ISSN: 0887-4476 the whole document ---	1-20
A	K. F. RHODES ET AL.: "WAY 100289: pharmacological profile of a novel 5-HT3 receptor antagonist." DRUG DEVELOPMENT RESEARCH., vol. 28, 1993, pages 128-140, XP000987255 NEW YORK, NY, US ISSN: 0272-4391 the whole document -----	1-20

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 00/19497

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5264372 A	23-11-1993	AT 172540 T	15-11-1998
		AT 170401 T	15-09-1998
		AU 1663092 A	21-10-1992
		AU 648895 B	05-05-1994
		AU 1687392 A	21-10-1992
		CA 2082928 A	16-09-1992
		CA 2082929 A	16-09-1992
		DE 69226835 D	08-10-1998
		DE 69226835 T	14-01-1999
		DE 69227347 D	26-11-1998
		DE 69227347 T	18-03-1999
		DK 529065 T	28-06-1999
		DK 533898 T	31-05-1999
		EP 0529065 A	03-03-1993
		EP 0533898 A	31-03-1993
		ES 2122995 T	01-01-1999
		IL 101233 A	15-04-1997
		IL 120081 A	27-12-1998
		IL 120082 A	27-12-1998
		MX 9201110 A	01-07-1993
		MX 9201113 A	01-10-1992
		WO 9216845 A	01-10-1992
		WO 9216222 A	01-10-1992
		US 5508260 A	16-04-1996
		US 5527771 A	18-06-1996
		US 5321008 A	14-06-1994
		ZA 9201884 A	03-08-1993